

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
29 December 2004 (29.12.2004)

PCT

(10) International Publication Number  
**WO 2004/113516 A1**

(51) International Patent Classification<sup>7</sup>: C12N 5/06, (74) Agents: ADAMS, Matthew, D. et al.; A J Park, 6th Floor  
A61K 35/39 Huddart Parker Building, PO Box 949, 6015 Wellington  
(NZ).

(21) International Application Number:  
PCT/NZ2003/000130

(22) International Filing Date: 24 June 2003 (24.06.2003)

(25) Filing Language: English

(26) Publication Language: English

(71) Applicant (*for all designated States except US*): DIAB-CELL PTY LIMITED [AU/AU]; 160 Greenhill Road, Parkside, South Australia 5063 (AU).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): SKINNER, Stephen, John, Martin [NZ/NZ]; 19 Laureston Avenue, Papatoetoe, Auckland (NZ). ELLIOTT, Robert, Bartlett [AU/NZ]; 19 Laureston Avenue, Papatoetoe, Auckland (NZ). ORELLANA, Livia, Del, Carmen Escobar [NZ/NZ]; 24/51 Cranbrook Place, Glendowie, Auckland (NZ).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU,

AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU,  
CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,  
MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,  
SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG,  
US, UZ, VC, VN, YU, ŽA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM,  
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),  
Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE,  
ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO,  
SE, SI, SK, TR), OAPI patent (BF, BJ, CR, CG, CI, CM,  
GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2004/113516 A1

(54) Title: PORCINE ISLETS CULTURED WITH PORCINE SERTOLI CELLS FOR XENOTRANSPLANTATION

(57) Abstract: Aggregates and their method of preparation suitable for implantation into a recipient in order to produce insulin in vivo. The methods involve culturing islet cells isolated from the pancreas of donor piglets with isolated Sertoli cells from the testes of donor piglets. A preferred period of culturing is 5 days and may be followed by a purification procedure.

BEST AVAILABLE COPY